

## STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

3100 Port of Benton Blvd • Richland, WA 99352 • (509) 372-7950

January 22, 2007

Mr. Roy J. Schepens, Manager Office of River Protection United States Department of Energy P.O. Box 450, MSIN: H6-60 Richland, Washington 99352 Mr. William S. Elkins, Project Director Bechtel National, Inc. 2435 Stevens Center Place, MSIN: H4-02 Richland, Washington 99354

Re: Hanford Facility RCRA Permit Modification Notification Form 24590-HLW-PCN-ENV-06-009; Class <sup>1</sup>1 Modification Request to the Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit, Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste, Part III, Operating Unit 10 (Waste Treatment and Immobilization Plant), WA7890008967

Dear Mr. Schepens and Mr. Elkins:

The Department of Ecology approves the referenced Class <sup>1</sup>1 Modification submitted by the United States Department of Energy – Office of River Protection. The approved Hanford Facility RCRA Permit Modification Notification Form is enclosed.

Modification 24590-HLW-PCN-ENV-06-009 provides a revised and updated engineering specification for the High-Level Waste (HLW) System. The document "Engineering Specification for HLW System HDH Canister Rinse Bogie," 24590-HLW-3PS-MQR0-TP002, Revision 2, will be incorporated into the Waste Treatment Plant Permit.

If there are any questions, contact me at 509-372-7882 or Ed Fredenburg at 509-372-7899.

Sincerely,

Brenda Becker-Khaleel

rende & Buhllulul

WTP Permit Lead

Nuclear Waste Program

ke:jc

Enclosure

cc: See next page

Mr. Schepens and Mr. Elkins January 22, 2007 Page 2

## cc electronic w/enc:

Robert Barr, USDOE
John Eschenberg, USDOE
Lori Huffman, USDOE
Tony McKarns, USDOE
Gae Neath, USDOE
Don Sommer, USDOE
Julie Atwood, BNI
Brad Erlandson, BNI
Peggy Fisher, BNI
Stan Hill, BNI
Dennis Klein, BNI
Sandi Murdock, BNI
Phil Peistrup, WGI

## cc w/enc:

Administrative Record: Tank Waste Treatment Requirements Environmental Portal VUSDOE-ORP Correspondence Control

## **Hanford Facility RCRA Permit Modification Notification Form**

Unit:

Permit Part & Chapter:

Waste Treatment and Immobilization Plant

Part III, Chapter 10 and Attachment 51

Description of Modification:

The purpose of this modification is to update Engineering Specification for HLW System HDH Canister Rinse Bogie (24590-HLW-3PS-MQR0-TP002) currently located in Appendix 10.7 of the Dangerous Waste Permit (DWP). The changes in the permit specification do not negatively affect the design of the vessel.

The following are the major changes to the above mentioned specification:

- Updates to the codes and standards. (Sections 2.1.1, 2.1.5, 2.2.14, 2.2.15, 2.2.16, 2.2.17, 2.2.18, 2.2.19, 5.2.1.20, 6.5, and 6.6)
- Updates to revisions of referenced documents as well as removal of sections/specifications invoked by reference that are not applicable to the HLW System HDH Canister Rinse Bogie specification. (Sections 2.3.1, 2.3.2, 2.3.3, 2.3.4, 2.3.5, 2.3.7, 2.3.11, 2.3.14, 5.1.6, 5.2.2.2, 5.2.2.17, 5.7.1, 5.7.8, 5.8.1.1, 6.1, 7.2, 8.2.3.1, 8.5.1 and Appendix C)
- Incorporation of in-structure response spectra in accordance with revised ground motion. (Sections 2.5.3, 2.5.4, 5.6.4.3 and Appendix B)
- Added tables for concrete placement tolerances and embedded item placement tolerances. These tables were
  previously identified in one of the referenced specifications (24590-WTP-3PS-D000-T0001). (Sections 5.1.3, 5.1.3.1,
  and 5.1.3.2)
- Editorial corrections to document numbers. (Sections 2.3.5 and 5.2.2.2)
- Added plant item numbers to the equipment descriptions. (Section 5.6.4.3)
- Changed statement at the end of section 5.7.1, "Seller shall report all conflicts to the Buyer. At such time, all conflicts shall be resolved."
- Additional detail is being added to sections discussing deviations from the requirements of the specification. (Section 5.7.8)
- Added additional tagging requirements for SSCs. (Sections 5.7.16 and 9.3)
- Added, "welded stainless steel mechanical tubing, conforming to ASTM A554, is acceptable for use, in the
  manufacture of structural members and support brackets." (Section 6.4)
- Clarified non-destructive examination requirements for full penetration and partial penetration welds. The
  requirements are being relaxed in the verbiage of the specification (from what was previously specified) and are now
  consistent with the referenced AWS D1.1 code and ANSI/AISC N690. UT and RT are not practical for partial
  penetration and fillet welds since there are no established acceptance criteria for these applications per AWS D1.1.
  Partial penetration and fillet welds do not have full penetration. If UT is performed on these types of welds, the
  results of the UT will indicate defects on a perfect weld since the weld did not have full penetration. RT is also
  problematic for partial penetration and fillet welds since it cannot examine the root pass of the weld due to the
  applications for these types of welds (e.g., "T" welds) (Section 8.5.4)
- Paint system code changed from "D" to "T" and identified that final paint color for equipment shall be in accordance with Appendix E of 24590-WTP-3PS-AFPS-T0001. (Sections 9.2.1 and 9.2.2)
- Removed section/appendices on design verification submittals, (Section 11.9 and Appendices D, E, F, and G)
- Added a section to identify documents that are incorporated by reference. These documents are associated with applicable codes and standards as they pertain to material equivalencies. Section 11.14)

These changes do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health or the environment. Any potential modifications to the design of the Canister Rinse Bogie due to the changes identified above are functionally equivalent to referenced codes and standards or are an upgrade.

With:	2459	0-HLW-3PS-MQI	R0-TP002, Rev.	2
Clas	s 1	Class 11	Class 2	Class 3
		X		
		With:   2459		

Enter Relevant WAC 173-303-830, Appendix I Modification citation number:

NA

Enter wording of WAC 173-303-830, Appendix I Modification citation: NA

In accordance with WAC 173-303-830(4)(d)(i), this modification notification is requested to be reviewed and approved as a

Quarter Ending 9/30/06

Class <sup>1</sup> 1 modification. WAC 173-303-830(d)(ii) states, "Class 1 modifications a current with routine changes to facility or its operation. These changes do not reduce the capacity of the facility to protect human health or the environment. director may require prior approval."	substantially alter the permit conditions or		
Modification Approved: Yes No (state reason for denial)	Reviewed by Ecology:		
Reason for denial:	Shah Mahl 1/22/07 S. Dahl Date		